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BERSEEM, OR EGYPTIAN CLOVER (*Trifolium alexandrinum*).

Berseem is an annual legume, with white flowers borne in heads, resembling those of red clover. The leaves, stems, and general habit of the plant are also similar to red clover. This legume has attracted a good deal of attention, owing to the fact that it is the great fodder crop of the Nile Valley. It is considered to be unequaled in Lower Egypt as a catch crop. Berseem is not at all adapted to growth in hot weather, but succeeds very well where the winters are so warm that there is no danger of frost. In regions characterized by moist, cool summers it has some promise. Successful results have been obtained in Washington and Oregon with this crop, but elsewhere only in the southern border of the United States below the frost line. Preliminary tests in the Columbia River Valley in Washington seem to indicate that under the peculiar conditions incident to the Cascade section of the Columbia River region it will go through the winter when seeded the last of August and furnish an abundance of pasture in the spring. It can be utilized both as a soiling crop, to be cut and fed green, and as a soil-improving crop, to be turned under to increase the humus and nitrogen content of the land upon which it is grown. In the extreme southern portion of the United States, from California to Texas, berseem has been found to succeed fairly well under irrigation and is adapted for growth as a winter crop in short rotations. As a forage crop it can not ordinarily compete with alfalfa, which is so well adapted to that section.

It is probable that many of the failures with berseem in sections where it should thrive have been due to lack of proper inoculation. Soil from plants of well-inoculated berseem is ordinarily not available in this country, but pure cultures may usually be obtained free from the United States Department of Agriculture. When well-inoculated soil is available, however, it may be mixed with the seed, pound for pound, and the two sown together. Since the sun's rays are very injurious to the inoculating germs, it is necessary to

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sow the inoculated seed on a cloudy day, or after sundown, or immediately behind the horses and in front of the covering harrow. This last can be done if the one who sows the seed walks by the side of the harrow, scattering the seed for the width of the harrow and just behind the horses' hoofs. Any seedings of berseem should ordinarily be made on a small scale until its success or failure in a given locality is determined. It is suggested, where trial seedings are made, that different methods and dates of seeding be used, in order to determine which treatment is the best for the particular locality in question. It is possible that berseem may prove of value as a summer annual in the humid Northern States, where a clover adapted to the cool summers can be seeded in the spring to serve as a green-manure crop for increasing the fertility of the soil.

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